

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING** **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/530,539  
Source: pc5/10  
Date Processed by STIC: 11/21/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.2.2 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> ; EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER:

10/530,539

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 ☒ **Wrapped Nucleics  
Wrapped Aminos** The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 ☐ **Invalid Line Length** The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 ☐ **Misaligned Amino  
Numbering** The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 ☒ **Non-ASCII** The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 ☐ **Variable Length** Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 ☐ **PatentIn 2.0  
"bug"** A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 ☐ **Skipped Sequences  
(OLD RULES)** Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES." response to include the skipped sequences.
- 8 ☐ **Skipped Sequences  
(NEW RULES)** Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9 ☐ **Use of n's or Xaa's  
(NEW RULES)** Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 ☐ **Invalid <213>  
Response** Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 ☐ **Use of <220>** Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 ☐ **PatentIn 2.0  
"bug"** Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 ☐ **Misuse of n/Xaa** "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



PCT

*delete*

## RAW SEQUENCE LISTING

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:30

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

W--> 1 hvec.ST25

4 &lt;110&gt; APPLICANT: FRANCE HYBRIDES

6 &lt;120&gt; TITLE OF INVENTION: Process for producing a mammal rendered resistant to an infection by an

7        alphaherpesvirus by germinal transgenesis and mammal obtained by the employment  
8        of this process.

10 &lt;130&gt; FILE REFERENCE: hvec

C--&gt; 12 &lt;140&gt; CURRENT APPLICATION NUMBER: US/10/530,539

C--&gt; 12 &lt;141&gt; CURRENT FILING DATE: 2005-04-06

12 &lt;150&gt; PRIOR APPLICATION NUMBER: Fr02 12775

13 &lt;151&gt; PRIOR FILING DATE: 2002-10-15

15 &lt;160&gt; NUMBER OF SEQ ID NOS: 4

17 &lt;170&gt; SOFTWARE: PatentIn version 3.1

*see item 4 on  
Error Summary Sheet***Does Not Comply  
Corrected Diskette Number***ppr 1-13*

## ERRORED SEQUENCES

19 &lt;210&gt; SEQ ID NO: 1

20 &lt;211&gt; LENGTH: 440

21 &lt;212&gt; TYPE: PRT

22 &lt;213&gt; ORGANISM: artificial sequence

24 &lt;220&gt; FEATURE:

25 &lt;223&gt; OTHER INFORMATION: Artificial protein fusing the extracellular domain of the protein HveM of

26        the mouse and the crystallisable fragment of the human immunoglobulin G1

W--&gt; 27 &lt;400&gt; SEQUENCE: 1

29 Met Glu Pro Leu Pro Gly Trp Gly Ser Ala Pro Trp Ser

E--&gt; 30    Gln Ala Pro

E--&gt; 31    1        5        10

E--&gt; 32    15

34 Thr Asp Asn Thr Phe Arg Leu Val Pro Cys Val Phe Leu

E--&gt; 35    Leu Asn Leu

E--&gt; 36        20        25        30

39 Leu Gln Arg Ile Ser Ala Gln Pro Ser Cys Arg Gln Glu

E--&gt; 40    Glu Phe Leu

E--&gt; 41        35        40        45

E--&gt; 44 Val Gly Asp Glu Cys Cys Pro Met Cys Asn Pro Gly (Try)

E--&gt; 45    His Val Lys

E--&gt; 46        50        55        60

51 Gln Val Cys Ser Glu His Thr Gly Thr Val Cys Ala Pro

E--&gt; 52    Cys Pro Pro

E--&gt; 53        65        70        75

E--&gt; 54        80

56 Gln Thr Tyr Thr Ala His Ala Asn Gly Leu Ser Lys Cys

*see item 1 on Error  
Summary Sheet**also, use one space  
between each amino acid  
A MAXIMUM of 16  
amino acids per line  
amino acid designator*

E--> 57 Leu Pro Cys

*same  
env*

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TIME: 15:48:30

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

```

E--> 58      85      90
E--> 59      95
      61 Gly Val Cys Asp Pro Asp Met Gly Leu Leu Thr Trp Gln
E--> 62  Glu Cys Ser
E--> 63      100      105
E--> 64      110
      66 Ser Trp Lys Asp Thr Val Cys Arg Cys Ile Pro Gly Tyr
E--> 67  Phe Cys Glu
E--> 68      115      120      125
      71 Asn Gln Asp Gly Ser His Cys Ser Thr Cys Leu Gln His
E--> 72  Thr Thr Cys
E--> 73      130      135      140
      76 Pro Pro Gly Gln Arg Val Glu Lys Arg Gly Thr His Asp
E--> 77  Gln Asp Thr
E--> 78      145      150      155
E--> 79      160
      81 Val Cys Ala Asp Cys Leu Thr Gly Thr Phe Ser Leu Gly
E--> 82  Gly Thr Gln
E--> 83      165      170
E--> 84      175
      86 Glu Glu Cys Leu Pro Trp Thr Asn Cys Ser Ala Phe Gln
E--> 87  Gln Glu Val
E--> 88      180      185
E--> 89      190
      91 Arg Arg Gly Thr Asn Ser Thr Asp Thr Thr Cys Ser Ser
E--> 92  Asp Pro Glu
E--> 93      195      200      205
      96 Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
E--> 97  Cys Pro Ala
E--> 98      210      215      220
      101 Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
E--> 102  Pro Lys Pro
E--> 103      225      230      235
E--> 104      240
      106 Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
E--> 107  Cys Val Val
E--> 108      245      250
E--> 109      255
      111 Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
E--> 112  Trp Tyr Val
E--> 113      260      265      270
      116 Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
E--> 117  Glu Glu Gln
E--> 118      275      280      285
      121 Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
E--> 122  Leu His Gln
E--> 123      290      295      300
      126 Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
E--> 127  Asn Lys Ala

```

*some  
error*

## RAW SEQUENCE LISTING

DATE: 11/21/2005

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TIME: 15:48:30

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

```

E--> 128 305      310      315
E--> 129      320
      131 Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
E--> 132 Gly Gln Pro
E--> 133      325      330
E--> 134 335
      136 Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
E--> 137 Glu Leu Thr
E--> 138      340      345
E--> 139 350
      141 Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
E--> 142 Tyr Pro Ser
E--> 143      355      360      365
      146 Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
E--> 147 Asn Asn Tyr
E--> 148      370      375      380
      151 Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
E--> 152 Phe Leu Tyr
E--> 153 385      390      395
E--> 154 400
      156 Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
E--> 157 Asn Val Phe
E--> 158      405      410
E--> 159 415
      161 Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
E--> 162 Thr Gln Lys
E--> 163      420      425
E--> 164 430
      166 Ser Leu Ser Leu Ser Pro Gly Lys
E--> 168      435      440
      171 <210> SEQ ID NO: 2
      172 <211> LENGTH: 581
      173 <212> TYPE: PRT
      174 <213> ORGANISM: artificial sequence
      176 <220> FEATURE:
      177 <223> OTHER INFORMATION: Artificial protein fusing the extracellular domain (domains
V-C-C) of the
      178 protein HveC of the pig and the crystallisable fragment of the human
      179 immunoglobulin G1
W--> 180 <400> SEQUENCE: 2
      182 Met Ala Arg Met Gly Leu Ala Gly Ala Ala Gly Arg Trp
E--> 183 Trp Gly Leu
E--> 184 1      5      10
E--> 185 15
      187 Ala Leu Gly Leu Thr Ala Phe Phe Leu Pro Gly Ala His
E--> 188 Thr Gln Val
E--> 189      20      25      30
      192 Val Gln Val Asn Asp Ser Met Tyr Gly Phe Ile Gly Thr
E--> 193 Asp Val Val
E--> 194      35      40      45

```

*same**same*

## RAW SEQUENCE LISTING

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:31

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

```

197 Leu His Cys Ser Phe Ala Asn Pro Leu Pro Gly Val Lys
E--> 198 Ile Thr Gln
E--> 199 50      55      60
202 Val Thr Trp Gln Lys Ala Thr Asn Gly Ser Lys Gln Asn
E--> 203 Val Ala Ile
E--> 204 65      70      75
E--> 205 80
207 Tyr Asn Pro Ala Met Gly Val Ser Val Leu Ala Pro Tyr
E--> 208 Arg Glu Arg
E--> 209 85      90
E--> 210 95
212 Val Glu Phe Leu Arg Pro Ser Phe Thr Asp Gly Thr Ile
E--> 213 Arg Leu Ser
E--> 214 100     105
E--> 215 110
217 Arg Leu Glu Leu Glu Asp Glu Gly Val Tyr Ile Cys Glu
E--> 218 Phe Ala Thr
E--> 219 115     120     125
223 Phe Pro Ala Gly Asn Arg Glu Ser Gln Leu Asn Leu Thr
E--> 224 Val Met Ala
E--> 225 130     135     140
228 Lys Pro Thr Asn Trp Ile Glu Gly Thr Gln Ala Val Leu
E--> 229 Arg Ala Lys
E--> 230 145     150     155
E--> 231 160
233 Lys Gly Lys Asp Asp Lys Val Leu Val Ala Thr Cys Thr
E--> 234 Ser Ala Asn
E--> 235 165     170
E--> 236 175
238 Gly Lys Pro Pro Ser Val Val Ser Trp Glu Thr His Leu
E--> 239 Lys Gly Glu
E--> 240 180     185
E--> 241 190
243 Ala Glu Tyr Gln Glu Ile Arg Asn Pro Asn Gly Thr Val
E--> 244 Thr Val Ile
E--> 245 195     200     205
248 Ser Arg Tyr Arg Leu Val Pro Ser Arg Glu Asp His Arg
E--> 249 Gln Ser Leu
E--> 250 210     215     220
253 Ala Cys Ile Val Asn Tyr His Met Asp Arg Phe Arg Glu
E--> 254 Ser Leu Thr
E--> 255 225     230     235
E--> 256 240
258 Leu Asn Val Gln Tyr Glu Pro Glu Val Thr Ile Glu Gly
E--> 259 Phe Asp Gly
E--> 260 245     250
E--> 261 255
263 Asn Trp Tyr Leu Gln Arg Met Asp Val Lys Leu Thr Cys
E--> 264 Lys Ala Asp

```

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TIME: 15:48:31

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

E--> 265      260      265  
E--> 266      270  
268 Ala Asn Pro Pro Ala Thr Glu Tyr His Trp Thr Thr Leu  
E--> 269      Asn Gly Ser  
E--> 270      275      280      285  
273 Leu Pro Lys Gly Val Glu Ala Gln Asn Arg Thr Leu Phe  
E--> 274      Phe Arg Gly  
E--> 275      290      295      300  
278 Pro Ile Asn Tyr Ser Met Ala Gly Thr Tyr Ile Cys Glu  
E--> 279      Ala Thr Asn  
E--> 280      305      310      315  
E--> 281      320  
283 Pro Ile Gly Thr Arg Ser Gly Gln Val Glu Val Asn Ile  
E--> 284      Thr Glu Phe  
E--> 285      325      330  
E--> 286      335  
288 Pro Tyr Thr Pro Ser Pro Pro Glu His Ala Asp Pro Glu  
E--> 289      Glu Pro Lys  
E--> 290      340      345  
E--> 291      350  
293 Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala  
E--> 294      Pro Glu Leu  
E--> 295      355      360      365  
298 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro  
E--> 299      Lys Asp Thr  
E--> 300      370      375      380  
303 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val  
E--> 304      Val Asp Val  
E--> 305      385      390      395  
E--> 306      400  
308 Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val  
E--> 309      Asp Gly Val  
E--> 310      405      410  
E--> 311      415  
313 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln  
E--> 314      Tyr Asn Ser  
E--> 315      420      425  
E--> 316      430  
318 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln  
E--> 319      Asp Trp Leu  
E--> 320      435      440      445  
323 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala  
E--> 324      Leu Pro Ala  
E--> 325      450      455      460  
328 Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro  
E--> 329      Arg Glu Pro  
E--> 330      465      470      475  
E--> 331      480  
333 Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr

*same*



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Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

E--> 334 Lys Asn Gln  
 E--> 335 485 490  
 E--> 336 495  
 338 Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser  
 E--> 339 Asp Ile Ala  
 E--> 340 500 505  
 E--> 341 510  
 343 Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr  
 E--> 344 Lys Thr Thr  
 E--> 345 515 520 525  
 348 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr  
 E--> 349 Ser Lys Leu  
 E--> 350 530 535 540  
 353 Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe  
 E--> 354 Ser Cys Ser  
 E--> 355 545 550 555  
 E--> 356 560  
 358 Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys  
 E--> 359 Ser Leu Ser  
 E--> 360 565 570  
 E--> 361 575  
 363 Leu Ser Pro Gly Lys  
 E--> 365 580  
 368 <210> SEQ ID NO: 3  
 369 <211> LENGTH: 376  
 370 <212> TYPE: PRT  
 371 <213> ORGANISM: artificial sequence  
 373 <220> FEATURE:  
 375 <223> OTHER INFORMATION: Artificial protein fusing the V domain of the protein HveC  
 of the pig and  
 376 the crystallisable fragment of the porcine immunoglobulin G1  
 W--> 377 <400> SEQUENCE: 3  
 379 Met Ala Arg Met Gly Leu Ala Gly Ala Ala Gly Arg Trp  
 E--> 380 Trp Gly Leu  
 E--> 381 1 5 10  
 E--> 382 15  
 384 Ala Leu Gly Leu Thr Ala Phe Phe Leu Pro Gly Ala His  
 E--> 385 Thr Gln Val  
 E--> 386 20 25 30  
 391 Val Gln Val Asn Asp Ser Met Tyr Gly Phe Ile Gly Thr  
 E--> 392 Asp Val Val  
 E--> 393 35 40 45  
 396 Leu His Cys Ser Phe Ala Asn Pro Leu Pro Gly Val Lys  
 E--> 397 Ile Thr Gln  
 E--> 398 50 55 60  
 401 Val Thr Trp Gln Lys Ala Thr Asn Gly Ser Lys Gln Asn  
 E--> 402 Val Ala Ile  
 E--> 403 65 70 75  
 E--> 404 80  
 406 Tyr Asn Pro Ala Met Gly Val Ser Val Leu Ala Pro Tyr

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TIME: 15:48:31

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

E--> 407 Arg Glu Arg  
E--> 408 85 90  
E--> 409 95  
411 Val Glu Phe Leu Arg Pro Ser Phe Thr Asp Gly Thr Ile  
E--> 412 Arg Leu Ser  
E--> 413 100 105  
E--> 414 110  
416 Arg Leu Glu Leu Glu Asp Glu Gly Val Tyr Ile Cys Glu  
E--> 417 Phe Ala Thr  
E--> 418 115 120 125  
421 Phe Pro Ala Gly Asn Arg Glu Ser Gln Leu Asn Leu Thr  
E--> 422 Val Met Gly  
E--> 423 130 135 140  
426 Ser Val Gly Ile His Gln Pro Gln Thr Cys Pro Ile Cys  
E--> 427 Pro Gly Cys  
E--> 428 145 150 155  
E--> 429 160  
431 Glu Val Ala Gly Pro Ser Val Phe Ile Phe Pro Pro Lys  
E--> 432 Pro Lys Asp  
E--> 433 165 170  
E--> 434 175  
436 Thr Leu Met Ile Ser Gln Thr Pro Glu Val Thr Cys Val  
E--> 437 Val Val Asp  
E--> 438 180 185  
E--> 439 190  
441 Val Ser Lys Glu His Ala Glu Val Gln Phe Ser Trp Tyr  
E--> 442 Val Asp Gly  
E--> 443 195 200 205  
446 Val Glu Val His Thr Ala Glu Thr Arg Pro Lys Glu Glu  
E--> 447 Gln Phe Asn  
E--> 448 210 215 220  
451 Ser Thr Tyr Arg Val Val Ser Val Leu Pro Ile Gln His  
E--> 452 Gln Asp Trp  
E--> 453 225 230 235  
E--> 454 240  
456 Leu Lys Gly Lys Glu Phe Lys Cys Lys Val Asn Asn Val  
E--> 457 Asp Leu Pro  
E--> 458 245 250  
E--> 459 255  
461 Ala Pro Ile Thr Arg Thr Ile Ser Lys Ala Ile Gly Gln  
E--> 462 Ser Arg Glu  
E--> 463 260 265  
E--> 464 270  
466 Pro Gln Val Tyr Thr Leu Pro Pro Pro Ala Glu Glu Leu  
E--> 467 Ser Arg Ser  
E--> 468 275 280 285  
471 Lys Val Thr Leu Thr Cys Leu Val Ile Gly Phe Tyr Pro  
E--> 472 Pro Asp Ile  
E--> 473 290 295 300

*same*

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Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

476 His Val Glu Trp Lys Ser Asn Gly Gln Pro Glu Pro Glu  
 E--> 477 Asn Thr Tyr  
 E--> 478 305 310 315  
 E--> 479 320  
 483 Arg Thr Thr Pro Pro Gln Gln Asp Val Asp Gly Thr Phe  
 E--> 484 Phe Leu Tyr  
 E--> 485 325 330  
 E--> 486 335  
 488 Ser Lys Leu Ala Val Asp Lys Ala Arg Trp Asp His Gly  
 E--> 489 Asp Lys Phe  
 E--> 490 340 345  
 E--> 491 350  
 493 Glu Cys Ala Val Met His Glu Ala Leu His Asn His Tyr  
 E--> 494 Thr Gln Lys  
 E--> 495 355 360 365  
 498 Ser Ile Ser Lys Thr Gln Gly Lys  
 E--> 500 370 375  
 503 <210> SEQ ID NO: 4  
 504 <211> LENGTH: 578  
 505 <212> TYPE: PRT  
 506 <213> ORGANISM: artificial sequence  
 508 <220> FEATURE:  
 509 <223> OTHER INFORMATION: Artificial protein fusing the extracellular domain (domains  
 V-C-C) of the  
 510 protein HveC of the pig and the crystallisable fragment of the porcine  
 511 immunoglobulin G1  
 W--> 512 <400> SEQUENCE: 4  
 514 Met Ala Arg Met Gly Leu Ala Gly Ala Ala Gly Arg Trp  
 E--> 515 Trp Gly Leu  
 E--> 516 1 5 10  
 E--> 517 15  
 519 Ala Leu Gly Leu Thr Ala Phe Phe Leu Pro Gly Ala His  
 E--> 520 Thr Gln Val  
 E--> 521 20 25 30  
 524 Val Gln Val Asn Asp Ser Met Tyr Gly Phe Ile Gly Thr  
 E--> 525 Asp Val Val  
 E--> 526 35 40 45  
 529 Leu His Cys Ser Phe Ala Asn Pro Leu Pro Gly Val Lys  
 E--> 530 Ile Thr Gln  
 E--> 531 50 55 60  
 534 Val Thr Trp Gln Lys Ala Thr Asn Gly Ser Lys Gln Asn  
 E--> 535 Val Ala Ile  
 E--> 536 65 70 75  
 E--> 537 80  
 539 Tyr Asn Pro Ala Met Gly Val Ser Val Leu Ala Pro Tyr  
 E--> 540 Arg Glu Arg  
 E--> 541 85 90  
 E--> 542 95  
 544 Val Glu Phe Leu Arg Pro Ser Phe Thr Asp Gly Thr Ile  
 E--> 545 Arg Leu Ser

## RAW SEQUENCE LISTING

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TIME: 15:48:31

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

```

E--> 546      100      105
E--> 547      110
      549 Arg Leu Glu Leu Glu Asp Glu Gly Val Tyr Ile Cys Glu
E--> 550 Phe Ala Thr
E--> 551      115      120      125
      554 Phe Pro Ala Gly Asn Arg Glu Ser Gln Leu Asn Leu Thr
E--> 555 Val Met Ala
E--> 556      130      135      140
      559 Lys Pro Thr Asn Trp Ile Glu Gly Thr Gln Ala Val Leu
E--> 560 Arg Ala Lys
E--> 561      145      150      155
E--> 562      160
      564 Lys Gly Lys Asp Asp Lys Val Leu Val Ala Thr Cys Thr
E--> 565 Ser Ala Asn
E--> 566      165      170
E--> 567      175
      569 Gly Lys Pro Pro Ser Val Val Ser Trp Glu Thr His Leu
E--> 570 Lys Gly Glu
E--> 571      180      185
E--> 572      190
      574 Ala Glu Tyr Gln Glu Ile Arg Asn Pro Asn Gly Thr Val
E--> 575 Thr Val Ile
E--> 576      195      200      205
      579 Ser Arg Tyr Arg Leu Val Pro Ser Arg Glu Asp His Arg
E--> 580 Gln Ser Leu
E--> 581      210      215      220
      584 Ala Cys Ile Val Asn Tyr His Met Asp Arg Phe Arg Glu
E--> 585 Ser Leu Thr
E--> 586      225      230      235
E--> 587      240
      589 Leu Asn Val Gln Tyr Glu Pro Glu Val Thr Ile Glu Gly
E--> 590 Phe Asp Gly
E--> 591      245      250
E--> 592      255
      594 Asn Trp Tyr Leu Gln Arg Met Asp Val Lys Leu Thr Cys
E--> 595 Lys Ala Asp
E--> 596      260      265
E--> 597      270
      599 Ala Asn Pro Pro Ala Thr Glu Tyr His Trp Thr Thr Leu
E--> 600 Asn Gly Ser
E--> 601      275      280      285
      604 Leu Pro Lys Gly Val Glu Ala Gln Asn Arg Thr Leu Phe
E--> 605 Phe Arg Gly
E--> 606      290      295      300
      609 Pro Ile Asn Tyr Ser Met Ala Gly Thr Tyr Ile Cys Glu
E--> 610 Ala Thr Asn
E--> 611      305      310      315
E--> 612      320
      614 Pro Ile Gly Thr Arg Ser Gly Gln Val Glu Val Asn Ile

```

*same*

## RAW SEQUENCE LISTING

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:31

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

E--> 615 Thr Glu Phe  
E--> 616 325 330  
E--> 617 335  
619 Pro Tyr Thr Pro Ser Pro Pro Glu His Gly Ser Val Gly  
E--> 620 Ile His Gln  
E--> 621 340 345  
E--> 622 350  
624 Pro Gln Thr Cys Pro Ile Cys Pro Gly Cys Glu Val Ala  
E--> 625 Gly Pro Ser  
E--> 626 355 360 365  
629 Val Phe Ile Phe Pro Pro Lys Pro Lys Asp Thr Leu Met  
E--> 630 Ile Ser Gln  
E--> 631 370 375 380  
634 Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser Lys  
E--> 635 Glu His Ala  
E--> 636 385 390 395  
E--> 637 400  
639 Glu Val Gln Phe Ser Trp Tyr Val Asp Gly Val Glu Val  
E--> 640 His Thr Ala  
E--> 641 405 410  
E--> 642 415  
644 Glu Thr Arg Pro Lys Glu Glu Gln Phe Asn Ser Thr Tyr  
E--> 645 Arg Val Val  
E--> 646 420 425  
E--> 647 430  
649 Ser Val Leu Pro Ile Gln His Gln Asp Trp Leu Lys Gly  
E--> 650 Lys Glu Phe  
E--> 651 435 440 445  
654 Lys Cys Lys Val Asn Asn Val Asp Leu Pro Ala Pro Ile  
E--> 655 Thr Arg Thr  
E--> 656 450 455 460  
659 Ile Ser Lys Ala Ile Gly Gln Ser Arg Glu Pro Gln Val  
E--> 660 Tyr Thr Leu  
E--> 661 465 470 475  
E--> 662 480  
664 Pro Pro Pro Ala Glu Glu Leu Ser Arg Ser Lys Val Thr  
E--> 665 Leu Thr Cys  
E--> 666 485 490  
E--> 667 495  
669 Leu Val Ile Gly Phe Tyr Pro Pro Asp Ile His Val Glu  
E--> 670 Trp Lys Ser  
E--> 671 500 505  
E--> 672 510  
674 Asn Gly Gln Pro Glu Pro Glu Asn Thr Tyr Arg Thr Thr  
E--> 675 Pro Pro Gln  
E--> 676 515 520 525  
679 Gln Asp Val Asp Gly Thr Phe Phe Leu Tyr Ser Lys Leu  
E--> 680 Ala Val Asp  
E--> 681 530 535 540

*same*

## RAW SEQUENCE LISTING

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:31

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

684 Lys Ala Arg Trp Asp His Gly Asp Lys Phe Glu Cys Ala  
E--> 685 Val Met His  
E--> 686 545 550 555  
E--> 687 560  
689 Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Ile Ser  
E--> 690 Lys Thr Gln  
E--> 691 565 570  
E--> 692 575  
694 Gly Lys

*same*

## RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:32

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 7,25

Seq#:2; Line(s) 177

Seq#:3; Line(s) 375

Seq#:4; Line(s) 509

## VERIFICATION SUMMARY

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:32

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

L:1 M:259 W: Allowed number of lines exceeded, (1) GENERAL INFORMATION:  
L:12 M:270 C: Current Application Number differs, Replaced Current Application No  
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:27 M:283 W: Missing Blank Line separator, <400> field identifier  
L:30 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:31 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:32 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:35 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:36 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:40 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:41 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:44 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1  
L:45 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:46 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:52 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:53 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:54 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:57 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:58 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:59 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:62 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:63 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:64 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:67 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:68 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:72 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:73 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:77 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:78 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:79 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:82 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:83 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:84 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:87 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:88 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:89 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:92 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:93 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:97 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:98 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:102 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:103 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:104 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:107 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:108 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:109 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:112 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:113 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1



## VERIFICATION SUMMARY

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:32

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

L:117 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:118 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:122 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:123 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:127 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:128 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:129 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:132 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:133 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:134 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:137 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:138 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:139 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:142 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:143 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:147 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:148 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:152 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:153 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:154 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:157 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:158 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:159 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:162 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:163 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:164 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:168 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:180 M:283 W: Missing Blank Line separator, <400> field identifier  
L:183 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:184 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:185 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:188 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:189 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:193 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:194 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:198 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:199 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:203 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:204 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:205 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:208 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:209 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:210 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:213 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:214 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:215 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:218 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:219 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:224 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2

## VERIFICATION SUMMARY

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:32

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

L:225 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:229 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:230 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:231 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:234 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:235 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:236 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:239 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:240 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:241 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:244 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:245 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:249 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:250 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:254 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:255 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:256 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:259 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:260 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:261 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:264 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:265 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:266 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:269 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:270 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:274 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:275 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:279 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:280 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:281 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:284 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:285 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:286 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:289 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:290 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:291 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:294 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:295 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:299 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:300 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:304 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:305 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:306 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:309 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:310 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:311 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:314 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:315 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:316 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2

## VERIFICATION SUMMARY

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:32

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

L:319 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:320 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:324 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:325 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:329 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:330 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:331 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:334 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:335 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:336 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:339 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:340 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:341 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:344 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:345 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:349 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:350 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:354 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:355 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:356 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:359 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:360 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:361 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:365 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
L:377 M:283 W: Missing Blank Line separator, <400> field identifier  
L:380 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:381 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:382 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:385 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:386 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:392 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:393 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:397 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:398 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:402 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:403 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:404 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:407 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:408 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:409 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:412 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:413 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:414 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:417 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:418 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:422 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:423 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:427 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:428 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3

## VERIFICATION SUMMARY

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:32

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

L:429 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:432 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:433 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:434 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:437 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:438 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:439 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:442 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:443 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:447 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:448 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:452 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:453 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:454 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:457 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:458 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:459 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:462 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:463 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:464 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:467 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:468 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:472 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:473 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:477 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:478 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:479 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:484 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:485 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:486 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:489 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:490 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:491 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:494 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:495 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:500 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
L:512 M:283 W: Missing Blank Line separator, <400> field identifier  
L:515 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:516 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:517 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:520 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:521 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:525 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:526 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:530 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:531 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:535 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:536 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:537 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4

## VERIFICATION SUMMARY

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:32

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

L:540 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:541 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:542 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:545 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:546 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:547 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:550 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:551 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:555 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:556 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:560 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:561 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:562 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:565 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:566 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:567 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:570 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:571 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:572 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:575 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:576 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:580 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:581 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:585 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:586 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:587 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:590 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:591 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:592 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:595 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:596 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:597 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:600 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:601 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:605 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:606 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:610 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:611 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:612 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:615 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:616 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:617 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:620 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:621 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:622 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:625 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:626 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:630 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:631 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4

## VERIFICATION SUMMARY

DATE: 11/21/2005

PATENT APPLICATION: US/10/530,539

TIME: 15:48:32

Input Set : N:\Rasheed\6648-WO sequence listing.txt

Output Set: N:\CRF4\11212005\J530539.raw

L:635 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:636 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:637 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:640 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:641 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:642 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:645 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:646 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:647 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:650 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:651 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:655 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:656 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:660 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:661 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:662 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:665 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:666 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:667 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:670 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:671 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:672 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:675 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:676 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:680 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:681 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:685 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:686 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:687 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:690 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:691 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
L:692 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4